



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/716,646	11/19/2003	Rasmus Villefrance	684-011600-US (PAR)	7660
2512	7590	09/30/2008	EXAMINER	
PERMAN & GREEN			SMITH, MARCUS	
425 POST ROAD			ART UNIT	PAPER NUMBER
FAIRFIELD, CT 06824			2619	
			MAIL DATE	DELIVERY MODE
			09/30/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/716,646	VILLEFRANCE ET AL.	
	Examiner	Art Unit	
	MARCUS R. SMITH	2619	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 6/23/08.
- 2a) This action is **FINAL**. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-3,7-18 and 22-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-3,7-12 and 15-26 is/are rejected.
- 7) Claim(s) 13 and 14 is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ . |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____. | 6) <input type="checkbox"/> Other: _____ . |

DETAILED ACTION

Response to Amendment

1. The amendment filed on 6/23/08 under 37 CFR 1.131 is sufficient to overcome the Kawanka reference, 101 non-statutory and 112 rejections.

Claim Objections

2. Claim 1 and 18 objected to because of the following informalities: Claim 1 and 18 uses optionally language like "operative to", "adapted to", and "operable for". The examiner has address the claim as if the optionally language is considered. Appropriate correction is required.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claim 2 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

5. Regarding claim 2, the phrase "such as" renders the claim indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention.

See MPEP § 2173.05(d). The examiner also renders claim 2 indefinite because the phrase "a peripheral thereto" is an unclear limitations as well.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 1-3, 7, 22-26 are rejected under 35 U.S.C. 102(e) as being anticipated by Deml et al. (US 6,996,126).

with regard to claims 1,18, 23-26 (figures 1-2, 5):

A system comprising a plurality of connected modules (26, 28, 30) and providing data communication between the connected modules, wherein individual ones of said modules are operative to transmit to and receive from one another of said modules a data package carrying a message (column 3, lines 10-20)

wherein an individual one of the modules includes a generator of a data link layer and a generator of a physical layer for encapsulating the message (column 4, lines 5-23),

wherein said data package is a block of data or a data packet or a datagram, the data package being composed of a sequence of bits arranged in fields, the fields being disposed in a plurality of layers constituting a layered structure (column 4, lines 5-23), comprising:

a physical layer having a first segment and a second segment encapsulating other ones of the layers in said layered structure, the physical layer being provided by a physical layer generator in one of said modules and serving to convey a bit stream through a network of said modules (inherent),

a data link layer (68, Ethernet header inserter) comprising a data link layer control section for carrying data link layer control data and a data section for carrying data for said other layers, the data link layer being provided by a data-link layer generator in said one module and being enclosed by the segments of said physical layer (column 5, lines 40-45), and

a transport layer (66, IP header inserter) enclosed by the data link layer, the transport layer being provided by a transport layer router in said one module and having a connection number field for identifying an object communicating via said router within said module, the transport layer defining a message in said data section (column 5, lines 40-55), which message is configured according to a transport layer protocol and comprises (see figures 4 and 5):

a payload (AAL2/5 packet) and a first header field for format of said payload (protocol ID),

a second header field for start of said payload in said message (IP header checksum),

a third header field for length of said message (Total length),

a fourth header field for version of said transport layer protocol (version),

a fifth header field for message group identity establishing receiving resource format of said payload (type of service),
a sixth header field providing a message identity (identification) ,
a seventh header field for identifying an object in the module (flags), and
an eighth header field for sequencing a message relative to other messages (fragmentation).

with regard to claim 2:

A system according to claim 1, wherein individual ones of said modules comprise a mobile communication device such as a cell, mobile or satellite telephone, a personal digital assistant, or a peripheral thereto (column 3, lines 10-15)

with regard to claim 3:

A system according to claim 1, wherein individual ones of said modules comprise one or more objects, in addition to said object of said one module, communicating said message with one another; and said individual modules further comprise a data link layer generator and physical layer generator, in addition to said- data link layer generator and said physical layer generator of said one module, adapted to encapsulate said message according to a data link layer protocol and to a physical layer protocol, respectively (column 4, lines 15-34).

with regard to claim 7:

A system according to claim 1, wherein said data link control data comprises a checksum field following said message (CRC footer, column 4, lines 10-16).

with regard to claims 17 and 22:

A system according to claim 1, wherein said data link control data comprises a checksum field following said message (inherent, IP options is well known field in a IP header).

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 8-12, and 15-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Deml et al. (US 6,996,126) in view of Hwang et al. (US 7,123,628). with regard to claims 8-12,15-16:

Deml discloses all of the subject matter as described above except for wherein said first segment of said physical layer comprises a media field for defining media, across which the data package is transferred (claim 8), a synchronization field for synchronizing the receiving module with the transmitting module (claim 9), wherein said second segment of the physical layer comprises an index byte for providing the receiving module with information rewarding segmentation or partitioning of data contained in a message (claim 10), wherein said second segment further comprises a sequence and acknowledge field for providing a receiving module with information whether said data package is an acknowledgement message or an ordinary message (claim 11), comprises a sequence and an acknowledge field, and is adapted to inform whether an error was identified in the received data package, when said data package

is an acknowledgement message (claim 12), wherein said second segment further comprises a fill field for ensuring that all data packages sent over said port connector contain an even amount of bytes, (claim 15), or comprises a parity field for storing parity calculated on the basis of the data package excluding the parity field (claim 16).

Hwang et al teaches communication system with further details on the physical layer fields. It teaches using the physical layer to synchronization between nodes (column8, lines 23-30: step A7 in figure 7a). Thus the examiner views that the PHY_SYNC_REQ message has a synchronization field in it (claim 9). In column 14, table 2 and table 3 has physical header format, which has MAC frame type (media field, claim 8), Padding (fill field, claim 15), Eof (a parity field, claim 16), CRC (index byte, claim 10). In figure 7b, teaches how physical layers can receives channel acknowledgement from other nodes (column 8, lines 55-63, step B7). Thus the examiner views that the Channel request acknowledgement is an acknowledgement field of the message (claim 11). Also Hwang teaches how the acknowledgement message can identified problem by last 3 bits in the received message (column 13, lines 35-45, claim 12). Thus the examiner views the Hwang et al teaches all those limitations above in order to have wireless stations to transmits multimedia information through the network with better efficiency (column 2, lines 45-50)

Therefore it would have been obvious to one having ordinary skill in the art at the time invention was made to all these physical layer header fields as taught by Hwang et al. in system of Deml in order to increase network efficiency to handle multimedia information over wireless channels.

Allowable Subject Matter

10. Claims 13-14 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

11. Applicant's arguments with respect to claims 1-3, 7-12, 15-26 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

12. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MARCUS R. SMITH whose telephone number is (571)270-1096. The examiner can normally be reached on Mon-Thurs: 7:30 am - 5:00 p.m. and every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wing Chan can be reached on 571 272-7493. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MRS
9/25/08

/Wing F. Chan/
Supervisory Patent Examiner, Art Unit 2619
9/25/08